

THE MOUNT SINAI MEDICAL CENT

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Mount Sinai School of Medicine • The Mount Sinai Hospital

Brookdale Center for Molecular Biology

June 6, 1988

Dr. Joshua Lederberg President The Rockefeller University 1230 York Avenue New York, NY 10021

Dear Dr. Lederberg:

Thank you for forwarding the reviews of our manuscript, "Asbestos Fibers Mediate Transformation of Monkey Cells by Exogenous Plasmid DNA," by J.D. Appel et al. We were satisfied with the assessments of the referees, and we respond here to their comments, as well as to your own comments, as follows.

Referee 1

- 1) On p. 20 we add a statement to indicate that asbestos-mediated transfection should be carried out in an organism to directly implicate transfection as a carcinogenic event. This would address any question of a differential effect on aneuploid vs. euploid cells.
- 2) On p. 17 we include an explanation of why not all small mineral particles that can bind DNA are likely to be carcinogens.

Referee 2

- 1) We include on p. 13 more explanation of the bands in Fig 2, C-F. The large bands seen are quite heterogeneous but of large size. If most of the plasmid is integrated, even if some is partially degraded, most of the hybridizing smear seen in the Bam HI digest should be >5 kb.
- 2) We have removed the sentence on p. 17 mentioning impalement of nuclei.

In addition we have made the following alterations.

- 1) We have included on p. 17 a reference to the transformation of cells mediated by tungsten microprojectiles. (Thank you again for bringing this to our attention.) This necessitated changing some of the references.
- 2) We have added two sentences on p. 16 related to cytotoxicity and describing an effect of asbestos on G418 killing of cells.
- 3) We have added a note in proof mentioning a new paper by Dubes' group on use of asbestos for transfecting with viral RNA. Quantitatively, their effect of asbestos vs. calcium phosphate is very similar to ours.

We have also made certain other minor corrections. The manuscript has not been extensively revised. We have made all of our changes in pencil in the margin to facilitate their identification. Enclosed are three copies of the new version of the text of the manuscript, without figures since we made no changes in those. Please substitute the new version of the text for the original one and, if acceptable, use the new one for communication.

We hope everything is now in order and that the manuscript will be suitable for publication in the Proceedings. Thank you again for your attention to our paper and for your thoughtful comments.

Sincerely,

Edward M. Johnson, Ph.D.

Professor